



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO.       |
|--|-------------|----------------------|--------------------------|------------------------|
| 10/657,499   | 09/08/2003  | Umesh Mahajan        | 112025-0130C1            | 9346                   |
| 24267 7590 10/26/2007<br>CESARI AND MCKENNA, LLP<br>88 BLACK FALCON AVENUE<br>BOSTON, MA 02210 |             |                      | EXAMINER<br>DUONG, DUC T |                        |
|  |             |                      | ART UNIT<br>2619         | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>10/26/2007  | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/657,499 | <b>Applicant(s)</b><br>MAHAJAN ET AL |  |
|                              | <b>Examiner</b><br>Duc T. Duong      | <b>Art Unit</b><br>2619              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 20-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Gai et al (US Patent 6,032,194).

Regarding to claims 20, 28, 34, and 40, Gai discloses a computer readable medium (fig. 2 col. 8 lines 45-50) containing executable program instructions for use by an intermediate network device 214 having a plurality of ports 230 for receiving and forwarding network messages (fig. 2 col. 8 lines 3-5), the executable program instructions comprising program instructions for configuring one or more ports as access ports 230 (col. 10 lines 1-5), wherein an access port is a port that does not provide connectivity to other portions of a computer network, but instead connects to a

Art Unit: 2619

Local Area Network LAN 109 (fig. 1 col. 7 lines 9-13); configuring one or more access ports as rapid forwarding ports 230 (col. 11 lines 8-15); identifying all ports that have been configured as access ports with rapid forwarding (fig. 2 col. 8 lines 24-39); and upon initialization of the device (detect link failure), placing each identified access port 230 with rapid forwarding directly to a forwarding spanning tree port state, without transitioning such identified ports between any intermediary spanning tree port states, so that network messages may be received and forwarded by such identified ports immediately (fig. 3D col. 12 lines 32-42).

Regarding to claims 21, 29, 35, 44, and 48, Gai discloses monitoring each of the one or more access ports configured with rapid forwarding for receipt of a configuration bridge protocol data unit (BPDU) message and in response to receiving a BPDU message at one of the access ports configured with rapid forwarding, placing the respective access port in a blocking spanning tree port state (fig. 3E col. 14 lines 25-51).

Regarding to claim 22, Gai discloses the intermediate network device has a memory 240 and the configuration of ports as access ports with rapid forwarding is stored at the memory (fig. 2 col. 8 lines 12-24).

Regarding to claims 23, 31, 37, 45, and 49, Gai discloses placing one or more other ports in a listening spanning tree port state (fig. 3D col. 10 lines 1-5), upon initialization of the device.

Regarding to claims 24, 32, 38, 43, 46, and 50, Gai discloses a computer readable medium (fig. 2 col. 8 lines 45-50) containing executable program instructions

Art Unit: 2619

for use by an intermediate network device 214 having a plurality of ports 230 for receiving and forwarding network messages (fig. 2 col. 8 lines 3-5), the executable program instructions comprising program instructions for configuring one or more ports as access ports 230 (col. 10 lines 1-5); configuring one or more access ports as rapid forwarding ports 230 (col. 11 lines 8-15); identifying all ports that have been configured as access ports with rapid forwarding (fig. 2 col. 8 lines 24-39); and upon initialization of the device (detect link failure), placing each identified access port 230 with rapid forwarding directly to a forwarding spanning tree port state, without transitioning such identified ports between any intermediary spanning tree port states, so that network messages may be received and forwarded by such identified ports immediately (fig. 3D col. 12 lines 32-42), wherein each access port configured with rapid forwarding is placed in the forwarding state prior to a link-up signal being received at the respective port (col. 14 lines 53-58).

Regarding to claims 25, 27, 33, and 47, Gai discloses generating and issuing one or more configuration bridge protocol data unit (BPDU) messages from each access port configured as rapid forwarding (col. 10 lines 1-25).

Regarding to claims 26, 39, 41, and 51, Gai discloses an end station is not coupled to a selected one of the access ports configured with rapid forwarding until after the respective access port is placed in the forwarding spanning tree port state (col. 13 lines 50-57).

Regarding to claims 30, 36, and 42, Gai discloses a method comprising configuring one or more ports as access ports 230 (col. 10 lines 1-5); configuring one or

Art Unit: 2619

more access ports as rapid forwarding ports 230 (col. 11 lines 8-15) by selecting with a management protocol (col. 4 lines 30-53), by a network administrator (col. 8 lines 52-56), the one or more access ports to have rapid forwarding designation; identifying all ports that have been configured as access ports with rapid forwarding (fig. 2 col. 8 lines 24-39); and upon initialization of the device (detect link failure), placing each identified access port 230 with rapid forwarding directly to a forwarding spanning tree port state, without transitioning such identified ports between any intermediary spanning tree port states, so that network messages may be received and forwarded by such identified ports immediately (fig. 3D col. 12 lines 32-42).

### ***Response to Arguments***

3. Applicant's arguments filed April 25, 2006 have been fully considered but they are not persuasive. Regarding to applicant's argument on pages 14-15, Gai fail to show "an access port is a port that does not provide connectivity to other portions of the computer network, but is instead simply connected to a LAN, a server, or an end station". In response, examiner would like to direct applicant's attention to fig. 1 col. 7 lines 9-13. Herein, Gai suggested the ports 119 of access switches 114-116 could be connected via a shared media LAN 109. These ports 110 are configured as rapid forwarding ports and are placed in forwarding state without transitioning to any intermediate states once a change occurs in the network (col. 11 lines 36-52 and col. 12 lines 32-42). Thus, based on the reasons set forth here the rejections are maintained.

**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD  
DD

  
WING CHAN 10/24/07  
SUPERVISORY PATENT EXAMINER